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10/807,930	03/23/2004	Craig Ogawa	15007.904US02	5139

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ART UNIT	PAPER NUMBER
2416	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/807,930	OGAWA ET AL.	
	Examiner	Art Unit	
	Anh Ngoc Nguyen	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 May 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Amendment

Applicants' Arguments/Remarks dated 05/11/2009 with respect to claims 1 – 22 have been fully considered but they are not persuasive.

Claims 1 and 14 have been amended. Claims 1 – 22 are pending.

Response to Arguments

Applicants' allege on pages 7 – 12 of Applicants' Remarks that the references of Tsukakoshi et al. (5,018,133; hereinafter Tuskakohsi) and Bodmer et al. (US 6,263,260; hereinafter Bodmer) are not combinable and Tsukakoshi is not directed to a building environment.

Examiner respectfully disagrees. The following are descriptions/definitions of LAN:

LANs have different topologies, the most common being the linear bus and the star configuration. In the former, a cable snakes through a building from one workstation to another (see http://www.linktionary.com/l/lan.html).

Local area networks (LANs) are computer networks ranging in size from a few computers in a single office to hundreds or even thousands of devices spread across several buildings. (see http://kb.iu.edu/data/aesx.html)

Definition: A local area network (LAN) supplies networking capability to a group of computers in close proximity to each other such as in an office building, a school, or a home (see http://compnetworking.about.com/cs/lanvlanwan/g/bldef_lan.htm)

It is well known in the art that a local area network (LAN) is a computer network that covers a small physical area such as a home, office, or small group of buildings, ex: school or

airport. Tsukakoshi is directed to a LAN system therefore Applicant's arguments that the reference of Tsukakoshi does not pertain to a building is not persuasive.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. Tsukakoshi teaches at least one main LAN and a plurality of sub-LANs are connected hierarchically through bridges (see abstract and Fig. 1). As described/defined above, LANs are well known to be pertaining to a building environment. Plus, Bodmer teaches a home and building automation system (see title).

In view of the above, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the LAN system as taught by Tsukakoshi in order to provide the advantage of having a home and building automation system that allows for considerable energy saving, improves comfort and increases the safety of the user, as discussed by Bodmer (see col. 4 lines 65 - 67). It is noted that Bodmer discusses many advantages (motivations) of implementing a home and building automation system in col. 4 lines 50 – 67.

Examiner respectfully disagrees with Applicants' assertion that Tsukakoshi does not have any such connection of building automation devices.

In view of the above, Tuskakoshi discloses a plurality of terminals devices 4 are connected with each of the subLANs (see col. 4 lines 20 – 22 and Fig. 1, terminals 4) where these devices are capable of being connected to the devices of Bodmer (see Fig. 2 and col. 3 lines 15 - 21, movement sensor 40, heating unit 24, smoke sensors, light detectors, etc…).

With respect to the claims 2, 3 and 16, Tsukakoshi in view of Bodmer disclose all of the limitations. Tsukakoshi teaches the control information (i.e. root ID, the root path cost, the backup flag,..is updated) [see col. 7 lines 20 - 22] and Bodmer teaches the electrical signals output by the computer, CPU or processor with the software, trigger allocated installations or installation groups via actuators. This is done directly or via intermediate components, for example a summing point and a PID regulator for a presence and activity-controlled control loop. The actuators can be single or multi-stage relays or other electromechanical devices known to the expert with normally open, normally closed or switching contacts. Installations or installation groups are for example lighting bodies, heating, valves for the flow of heating and cooling media, motors for venetian blinds and alarm systems (see col. 3 lines 22 - 33).

The patent and Trademark Office ("PTO") determines the scope of claim in patent applications not solely on the basis of the claim language, but upon giving the claims their broadest reasonable construction "in light of the specification as it would be interpreted by one of ordinary skill in the art."

The Patent and Trademark Office ("PTO") is not required, in the course of prosecution, to interpret claims in applications in the same manner as a court would interpret claims in an infringement suit. Rather, the "PTO applies to verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whether enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant's specification.

With respect to claim 9, Tsukakoshi teaches backup bridges (see Fig. 3 and col. 4 lines 35 - 37). Tsukakoshi teaches the backup flag indicating whether the bridge is a designated bridge or a backup bridge is checked (see col. 6 lines 6 - 10).

Concerning claim 9, in response to applicant's argument that the references fail to show certain features of applicant's invention (i.*e. the end user can configure the system with multiple bridges for redundancy and to eliminate a possible single point of failure in the Applicants' building automation system. Applicants' bridges may be at the opposite ends of a CAN network detecting whether the CAN network is operational...),* it is noted that the features upon which applicant relies are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.

Regarding claim 10, in response to applicant's argument that the references fail to show certain features of applicant's invention (in *Applicants' development, the CAN bus can break and each bridge can route packets from all devices with which they can communicate…*) it is noted that the features upon which applicant relies are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. Tsukakoshi teaches having backup bridges (col. 4 lines 35 - 37) 3BC and 3EF in Fig. 3 for relaying frames when the other bridges fail to operate.

Regarding claim 13, Tsukakoshi discloses further comprising a plurality of subnetworks connected to the local area network by a plurality of bridges (see Fig. 1, bridges 6A to 6C, 3AD to 3EF couple subLANs to LAN). In response to applicant's argument that the references fail to show certain features of applicant's invention (*Applicants' disclosure has a high speed LAN and a low speed LAN...)* it is noted that the features upon which applicant relies are not recited in the

rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.

With respect to claim 14, the patent and Trademark Office ("PTO") determines the scope of claim in patent applications not solely on the basis of the claim language, but upon giving the claims their broadest reasonable construction "in light of the specification as it would be interpreted by one of ordinary skill in the art."

The Patent and Trademark Office ("PTO") is not required, in the course of prosecution, to interpret claims in applications in the same manner as a court would interpret claims in an infringement suit. Rather, the "PTO applies to verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whether enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant's specification.

In response to applicant's argument that the references fail to show certain features of applicant's invention (*Applicants are claiming the sending of scripting data, i.e. program code, which is kept on the bridge and uploaded to specific automation devices as needed..*) it is noted that the features upon which applicant relies are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.

With respect to claim 22, Teaches rerouting packets by using backup bridges 3BCand 3EG where the bridges are coupled to subLANs (see Fig. 3). In response to applicant's argument that the references fail to show certain features of applicant's invention (*Applicants' development*

employs a very specific method of failover recovery...If the CAN bus should fail, Apllicants' system may still communicate with the devices on either side of the physical CAN bus break.) it is noted that the features upon which applicant relies are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.

Regarding claims 6 and 19, Bodmer teaches shifts the provision of hot water in the morning hours without any intervention of the user being necessary [the building to appear lived-in even when the user is not present] (see examples 1 - 3, col. 5 lines 65 - 67 and col. 6 lines 1 - 62). The patent and Trademark Office ("PTO") determines the scope of claim in patent applications not solely on the basis of the claim language, but upon giving the claims their broadest reasonable construction "in light of the specification as it would be interpreted by one of ordinary skill in the art."

Regarding claims 2 and 15, the reference of Razzaghe-Ashrafi (US 6,330,715; hereinafter Razzaghe-Ashrafi) discloses all the limitations. Razzaghe-Ashrafi teaches dynamically allocating an IP addresses when a NS device makes a DHCP request (see col. 5 lines 43 – 55).

Concerning the applicants' arguments on the dependent claims, Tsukakoshi et al (5,018,133), Bodmer et al (US 6,263,260), Razzaghe-Ashrafi (US 6,330,715), Kuechler et al (4,811,199), Focsaneanu et al (5,828,666), Craig et al (US 6,266,809), Kuechler et al (4,811,199), Bennett et al (5,666,359), Bird (US 6,728,268), and Gurer et al (US 7,120,819), showed the limitations singularly or in combination of a system and it were shown in combination to cover those limitations.

As a result the argued features are shown by the cited references as follows:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 3, 6, 9, 10, 13, 14, 16, 19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukakoshi et al (5,018,133) in view of Bodmer et al (US 6,263,260).

Tsukakoshi discloses network system comprising a plurality of LANs using hierarchical routing comprising the following features:

Regarding claim 1, Tsukakoshi discloses a bridge apparatus (see Fig. 4, col. 4 lines 40 – 50 and col. 5 lines 15 - 18, bridge) for a system comprising: a system controller (see Fig. 4, micro-processor 8); a first network controller (see Fig. 4, transmitting and receiving circuit 7A) operatively associated with the system controller (see Fig. 4, micro-processor 8), the first network controller connecting the bridge to a local area network (see Fig. 4 and col. 4 lines 40 - 50, transmitting and receiving circuit7A couples to main LAN 5); a second network controller (see Fig. 4, transmitting and receiving circuit 7B) operatively associated with the system controller (see Fig. 4, micro processor 8), and a processor-executed program code provided in computer-readable storage (see Fig. 4, buffer memory 9 for storing information, i.e. code) operatively associated with the system controller (see Fig. 4, micro processor 8), the processor-executed program code including: program code for receiving configuration information via the

local area network (see col. 6 lines 43 – 67 and col. 7 lines 1 – 35, passing the messages through the LAN).

Regarding claim 3, Tsukakoshi discloses wherein the processor- executing program code further includes program code for receiving updated configuration information via the local area network for the automation device in the subnetwork (see Fig. 1, 2, col. 6 lines 43 – 50 and col. 7 lines 20 - 25, each of the bridges updates control information in Step 146, one of the control information stored in each of the bridges being the root ID smallest in the received Hello message).

Regarding claim 9, Tsukakoshi discloses a system comprising: a local area network (see Fig. 1, more than one LANs are shown); a subnetwork for connecting at least one automation device (see Fig. 1 and col. 4 lines 14 – 24, a plurality of terminal devices 4 are connected with each of the subLANs); a first bridge connecting the subnetwork to the local area network (see Fig. 1 and col. 4 lines 14 - 24, bridges 6A, 6B, 6C couple the subLANs to LAN); a second bridge connecting the subnetwork to the local area network, wherein at least one of the bridges connects the subnetwork to the local area network even if the other bridge is offline (see Fig. 3, for example: bridges 3BC and 3EF are backup bridges for the designated bridges), such that every device in the building automation system always remains connected to the local area network even if one of the bridges is offline or it there is a fault in the subnetwork (see col. 4 lines 30 – 40 and col. 6 lines 1 – 20, designated bridges (3AD, 3BE, 3BF) which effect relay operation of a frame, and backup bridges (3BC, 3EF) indicated by X marks in Fig. 3 which don't effect relay operation of a frame).

Regarding claim 10, Tsukakoshi discloses wherein at least one of the bridges is

communicatively coupled to at least one automation device even if the subnetwork includes a break (see Fig. 3, for example: bridges 3BC and 3EF are backup bridges for the designated bridges).

Regarding claim 13, Tsukakoshi discloses further comprising a plurality of subnetworks connected to the local area network by a plurality of bridges (see Fig. 1, bridges 6A to 6C, 3AD to 3EF couple subLANs to LAN).

Regarding claim 14, Tsukakoshi discloses a method comprising: connecting a first bridge to a local area network (see Fig. 1, bridges 6A to 6C couple to main LAN 5); connecting the first bridge to a subnetwork of devices (see Fig. 1 and col. 4 lines 14 – 24, bridges 6A to 6C couple to subLANs 2A to 2C where terminal devices 4 are coupled to the subLANs); connecting a second bridge to a local area network (see Fig. 1, bridges 6A to 6C couple to main LAN 5); connecting the second bridge to the same subnetwork of devices (see Fig. 1 and col. 4 lines 14 – 24, bridges 6A to 6C couple to subLANs 2A to 2C where terminal devices 4 are coupled to the subLANs); receiving configuration information for a building automation device at the first bridge, second bridge or both bridges via the local area network (see col. 6 lines 43 – 67 and col. 7 lines 1 – 35, passing the messages through the LAN).

Regarding claim 22, Tsukakoshi discloses further comprising automatic rerouting of subnetwork traffic if a subnetwork fails (see Fig. 3, for example: bridges 3BC and 3EF are backup bridges for the designated bridges in case of failure to the designated bridges).

Tsukakoshi discloses the claimed limitations as stated above. Bodmer discloses home and automation system:

Regarding claim 1, the combination of Tsukakoshi and Bodmer disclose a building automation system (see Bodmer, abstract and col. 2 lines 40 - 60, process and system for programmed control of a home and building automation system) comprising: the second network controller connecting the bridge to a subnetwork to which subnetwork one or a plurality of building automation devices are connected (see Tsukakoshi; Fig. 1, Fig. 4 and col. 4 lines 40 - 50, transmitting and receiving circuit 7B couples to sub-LAN…a plurality of terminal devices 4; see Bodmer; col. 3 lines 16 – 22, smoke detectors, thermostats, etc...); program code (see col. 2 lines 65 – 67 and col. 3 lines 1 – 4, software stored in a CPU or processor) for configuring a building automation device connected to the subnetwork (see Tsukakoshi, Fig. 1, col. 3 lines 1 – 8 and col. 4 lines 14 - 24, subLANs 2A to 2F couple to terminal devices 4 where these devices 4 could be replaced with the devices of Bodmer, see Bobmer: Fig. 2 and col. 3 lines 15 - 21, movement sensor 40, heating unit 24, smoke sensors, light detectors, etc…) based on the configuration information, wherein the configuration information is one or more of program code, scripts, and data files, all for configuring a building automation device (see Tsukakoshi; col. 6 lines 40 – 50 and col. 7 lines 1 – 25, control information such as root ID, the root path cost, the backup flag; see Bodmer, col. 2 lines 48 - 54, col. 3 lines 40 – 45, and col. 4 lines 1 – 30, adaptive self-learning algorithms of the software, probability/predictive algorithms…), and wherein the building automation device is a device that performs a building - related automation function within the building automation system (see Bodmer, Fig. 2 and col. 3 lines 15 - 21, movement sensor 40, heating unit 24, smoke sensors, light detectors, etc…).

Regarding claim 6, the combination of Tsukakoshi and Bodmer disclose wherein the processor- executing program code further includes program code for operating automation

devices (see Tsukakoshi, Fig. 1 and col. 4 lines 14 – 24, a plurality of terminal devices 4 where these devices 4 could be replaced with the devices of Bodmer, see Bobmer: Fig. 2 and col. 3 lines 15 - 21, movement sensor 40, heating unit 24, smoke sensors, light detectors, etc…) in a mode that provides for the building to appear lived-in even when the user is not present (see Bodmer, examples 1 - 3, col. 5 lines 65 - 67 and col. 6 lines 1 - 62, shifts the provision of hot water in the morning hours without any intervention of the user being necessary).

Regarding claim 9, the combination of Tsukakoshi and Bodmer disclose a building automation system (see Bodmer, abstract and col. 2 lines 40 - 60, process and system for programmed control of a home and building automation system) and automation devices (see Tsukakoshi, Fig. 1 and col. 4 lines 14 – 24, a plurality of terminal devices 4 where these devices 4 could be replaced with the devices of Bodmer, see Bobmer: Fig. 2 and col. 3 lines 15 - 21, movement sensor 40, heating unit 24, smoke sensors, light detectors, etc…).

Regarding claim 14, the combination of Tsukakoshi and Bodmer disclose building automation devices (see Tsukakoshi, Fig. 1 and col. 4 lines 14 – 24, a plurality of terminal devices 4 where these devices 4 could be replaced with the devices of Bodmer, see Bobmer: Fig. 2 and col. 3 lines 15 - 21, movement sensor 40, heating unit 24, smoke sensors, light detectors, etc…), configuring the building automation device in the subnetwork (see Tsukakoshi, Fig. 1, col. 3 lines 1 – 8 and col. 4 lines 14 - 24, subLANs 2A to 2F couple to terminal devices 4 where these devices 4 could be replaced with the devices of Bodmer, see Bobmer: Fig. 2 and col. 3 lines 15 - 21, movement sensor 40, heating unit 24, smoke sensors, light detectors, etc…) based on the configuration information received at the first bridge, second bridge or both bridges (see Tsukakoshi, Fig. 1, col. 4 lines 14 – 55 and col. 7 lines 1 – 25, control information, i.e. messages

are sent through bridges), wherein the configuration information is one or more of program code, scripts, and data files, all for configuring a building automation device (see Tsukakoshi; col. 6 lines 40 – 50 and col. 7 lines 1 – 25, control information such as root ID, the root path cost, the backup flag; see Bodmer, col. 2 lines 48 - 54, col. 3 lines 40 – 45, and col. 4 lines 1 – 30, adaptive self-learning algorithms of the software, probability/predictive algorithms…), and wherein the building automation device is a device that performs a building related automation function within the building automation system (see Bodmer, Fig. 2 and col. 3 lines 15 - 21, movement sensor 40, heating unit 24, smoke sensors, light detectors, etc…).

Regarding claim 16, the combination of Tsukakoshi and Bodmer disclose further comprising receiving updated configuration information via the local area network for the building automation device (see Tsukakoshi, Fig. 1 and col. 4 lines 14 – 24, a plurality of terminal devices 4 where these devices 4 could be replaced with the devices of Bodmer, see Bobmer: Fig. 2 and col. 3 lines 15 - 21, movement sensor 40, heating unit 24, smoke sensors, light detectors, etc…) in the subnetwork (see Bodmer, Fig. 1, col. 4 lines 14 – 50, col. 6 lines 43 – 50, col. 7 lines 1 – 25, control information is updated).

Regarding claim 19, combination of Tsukakoshi and Bodmer disclose further comprising operating building automation devices (see Tsukakoshi, Fig. 1 and col. 4 lines 14 – 24, a plurality of terminal devices 4 where these devices 4 could be replaced with the devices of Bodmer, see Bobmer: Fig. 2 and col. 3 lines 15 - 21, movement sensor 40, heating unit 24, smoke sensors, light detectors, etc…) in a mode that provides for the building to appear lived-in even when the user is not present (see Bodmer, examples 1 - 3, col. 5 lines 65 - 67 and col. 6

lines 1 - 62, shifts the provision of hot water in the morning hours without any intervention of the user being necessary).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the invention of Tsukakoshi, and have the features, as taught by Bodmer, thus providing for a home and building automation system that allows for considerable energy saving, improves comfort and increases the safety of the user, as discussed by Bodmer (see col. 4 lines 50 - 67).

3. Claims 2 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukakoshi et al (5,018,133) in view of Bodmer et al (US 6,263,260) and further in view of Razzaghe-Ashrafi (US 6,330,715).

Tsukakoshi and Bodmer disclose the claimed limitations as stated in paragraph 4 above. Tsukakoshi and Bodmer do not explicitly disclose the following features: regarding claim 2, wherein the processor executing program code further includes program code for assigning a dynamic address to the automation device in the subnetwork; regarding claim 15, further comprising assigning a dynamic address to the building automation device in the subnetwork.

Razzaghe-Ashrafi discloses method and apparatus for managing software in a network system comprising the following features:

Regarding claim 2, Razzaghe-Ashrafi discloses wherein the processor executing program code further includes program code for assigning a dynamic address to the automation device in the subnetwork (see col. 5 lines 43 – 55, dynamically allocating an IP addresses when a NS device makes a DHCP request).

Regarding claim 15, Razzaghe-Ashrafi discloses further comprising assigning a dynamic address to the building automation device in the subnetwork (see col. 5 lines 43 – 55, dynamically allocating an IP addresses when a NS device makes a DHCP request).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the invention of Tsukakoshi and Bodmer, and have the features, as taught by Razzaghe-Ashrafi discloses, thus providing for an improved software management on NS devices, as discussed by Razzaghe-Ashrafi discloses (see col. 2 lines 55 - 60).

4. Claims 4 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukakoshi et al (5,018,133) in view of Bodmer et al (US 6,263,260) and further in view of Focsaneanu et al (5,828,666).

Tsukakoshi and Bodmer disclose the claimed limitations as stated in paragraph 4 above. Tsukakoshi and Bodmer do not explicitly disclose the following features: regarding claim 4, wherein the processor- executing program code further includes program code for maintaining a map of automation devices in the subnetwork; regarding claim 17, further comprising maintaining a map of building automation devices in the subnetwork.

Focsaneanu discloses access to telecommunications networks in multi service environment comprising the following features:

Regarding claim 4, Focsaneanu discloses wherein the processor- executing program code further includes program code for maintaining a map of automation devices in the subnetwork (see col. 14 lines 18 – 25, the access module maintains the point of presence or map among CPE devices, service providers, and network resources).

Regarding claim 17, Focsaneanu discloses further comprising maintaining a map of building automation devices in the subnetwork (see col. 14 lines 18 – 25, the access module maintains the point of presence or map among CPE devices, service providers, and network resources).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the invention of Tsukakoshi and Bodmer, and have the features, as taught by Focsaneanu, thus providing for a flexible access system to utilize any transport network resource on a service by service basis, as discussed by Focsaneanu (see col. 4 lines 25 - 30).

5. Claims 5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukakoshi et al (5,018,133) in view of Bodmer et al (US 6,263,260) and further in view of Kuechler et al (4,811,199).

Tsukakoshi and Bodmer disclose the claimed limitations as stated in paragraph 4 above. Tsukakoshi and Bodmer do not explicitly disclose the following features: regarding claim 5, wherein the processor- executing program code further includes program code for automatically updating the map if an automation device is added to the subnetwork; regarding claim 18, further comprising automatically updating a map of building automation devices in the subnetwork if a building automation device is added to the subnetwork.

Kuechler discloses system for storing and manipulating information in an information base comprising the following features:

Regarding claim 5, Kuechler discloses wherein the processor- executing program code further includes program code for automatically updating the map if an automation device is

added to the subnetwork (see col. 11 lines 48 – 60, since 100 elements have been added...the elements of the topological map to be updated will all be located in the same physical block).

Regarding claim 18, Kuechler discloses further comprising automatically updating a map of building automation devices in the subnetwork if a building automation device is added to the subnetwork (see col. 11 lines 48 – 60, since 100 elements have been added...the elements of the topological map to be updated will all be located in the same physical block).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the invention of Tsukakoshi and Bodmer, and have the features, as taught by Kuechler, thus to simplify data relational operations into straightforward manipulations which can easily be handled by a digital computer, as discussed by Kuechler (see col. 21 lines 33 - 38).

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukakoshi et al (5,018,133) in view of Bodmer et al (US 6,263,260) and further in view of Craig et al (US 6,266,809).

Tsukakoshi and Bodmer disclose the claimed limitations as stated in paragraph 4 above. Tsukakoshi and Bodmer do not explicitly disclose the following features: regarding claim 7, wherein the processor- executing program code further includes program code for updating firmware at the device in the subnetwork.

Craig discloses methods, systems and computer program products for secure firmware updates comprising the following features:

Regarding claim 7, Craig discloses wherein the processor- executing program code further includes program code for updating firmware at the device in the subnetwork (see

abstract, col. 2 lines 40 – 67, col. 3 lines 14 - 24 and col. 4 lines 19 - 31, update the firmware of a device attached to the network computer).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the invention of Tsukakoshi and Bodmer, and have the features, as taught by Craig, thus updating the firmware of a network computer without the need for a floppy drive or other portable storage media, as discussed by Craig (see col. 3 lines 25 - 30).

7. Claims 8 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukakoshi et al (5,018,133) in view of Bodmer et al (US 6,263,260) and further in view of Layton et al (US 6,829,478).

Tsukakoshi and Bodmer disclose the claimed limitations as stated in paragraph 4 above. Tsukakoshi and Bodmer do not explicitly disclose the following features: regarding claim 8, wherein the processor- executing program code further includes program code for resetting a device in the subnetwork; regarding claim 20, further comprising resetting a building automation device in the subnetwork.

Layton discloses information management network for automated delivery alarm notifications and other information comprising the following features:

Regarding claim 8, Layton discloses wherein the processor- executing program code further includes program code for resetting a device in the subnetwork (see col. 10 lines 40 – 50, remote activation or resetting of the alarm and other devices in the home for security and home automation purposes).

Regarding claim 20, Layton discloses further comprising resetting a building automation device in the subnetwork (see col. 10 lines 40 – 50, remote activation or resetting of the alarm and other devices in the home for security and home automation purposes).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the invention of Tsukakoshi and Bodmer, and have the features, as taught by Layton, thus provides to users and central station monitoring facilities an efficient and affordable event notification solution in which the call flow configuration of the invention is designed to enhance the safety and convenience of the customer, as discussed by Layton (see col. 3 lines 33 - 40).

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukakoshi et al (5,018,133) in view of Bodmer et al (US 6,263,260) and further in view of Bird (US 6,728,268).

Tsukakoshi and Bodmer disclose the claimed limitations as stated in paragraph 4 above. Tsukakoshi and Bodmer do not explicitly disclose the following features: regarding claim 11, wherein the subnetwork is a CAN bus.

Bird discloses method and system to connect internet protocol hosts via an application specific bus comprising the following features:

Regarding claim 11, Bird discloses wherein the subnetwork is a CAN bus (see col. 3 lines 29 – 34, connect IP hosts to an application specific control bus such as the Controller Area Network (CAN)).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the invention of Tsukakoshi and Bodmer, and have the features, as taught by

Bird, thus providing for a method and apparatus to transmit IP datagrams without interfering with the interaction of standard CAN devices, as discussed by Bird (see col. 2 lines 43 - 50).

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukakoshi et al (5,018,133) in view of Bodmer et al (US 6,263,260) and further in view of Bennett et al (5,666,359).

Tsukakoshi and Bodmer disclose the claimed limitations as stated in paragraph 4 above. Tsukakoshi and Bodmer do not explicitly disclose the following features: regarding claim 12, wherein the local area network is an Ethernet network.

Bennett discloses method and apparatus for displaying port information comprising the following features:

Regarding claim 12, Bennett discloses wherein the local area network is an Ethernet network (see col. 2 lines 40 - 45, network 10 can operate as an Ethernet local area network (LAN)).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the invention of Tsukakoshi and Bodmer, and have the features, as taught by Bennett, thus providing for a repeater that can both service data devices that operate using different communications protocols and effectively display port information, as discussed by Bennett (see col. 1 lines 45 - 50).

10. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukakoshi et al (5,018,133) in view of Bodmer et al (US 6,263,260) and further in view of Gurer et al (US 7,120,819).

Tsukakoshi and Bodmer disclose the claimed limitations as stated in paragraph 4 above. Tsukakoshi and Bodmer do not explicitly disclose the following features: regarding claim 21, further comprising isolation of a fault in the subnetwork.

Gurer discloses method and sytem for fault diagnosis in a data network comprising the following features:

Regarding claim 21, Gurer discloses further comprising isolation of a fault in the subnetwork (see col. 2 lines 20 – 50, col. 6 lines 30 – 35, col. 7 lines 35 – 49 and col. 8 lines 1 – 10, detects the fault by identifying the type of fault and isolating the misbehaving device in the network that is the cause of the fault).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the invention of Tsukakoshi and Bodmer, and have the features, as taught by Gurer, thus lessening the burdens on a network engineer and increasing efficiency in the process of diagnosing faults within a data network, as discussed by Gurer (see col. 2 lines 14 - 18).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh Ngoc Nguyen whose telephone number is (571) 270-5139. The examiner can normally be reached on M - F, from 7AM to 3PM (alternate first Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang Yao can be reached on 5712723182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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07/31/2209

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